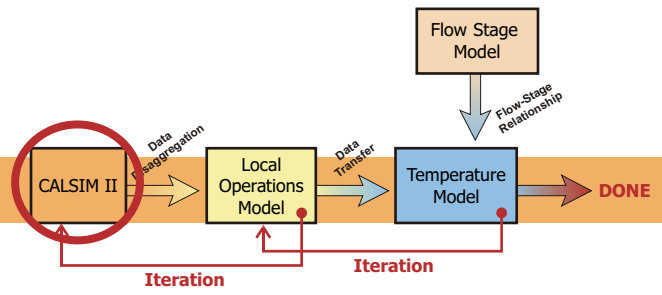


CALSIM II

Water Resources Simulation Model for SWP/CVP Operations

What is CALSIM II?

Statewide planning model

Simulates operations of SWP and CVP facilities, under a Coordinated Operations Agreement, on a monthly time-step

Represents the Sacramento and San Joaquin River system and Delta

Accounts for system operational objectives, physical constraints, legal and institutional agreements and statutes such as:

- USACE flood control guidelines and navigation flows
- Channel, outlet and pump capacities
- SWRCB Decisions, NMFS fish protections and biological opinions

Uses 73 years of historical water conditions (1922 – 1994), which are modified to reflect a certain (fixed) level of development.

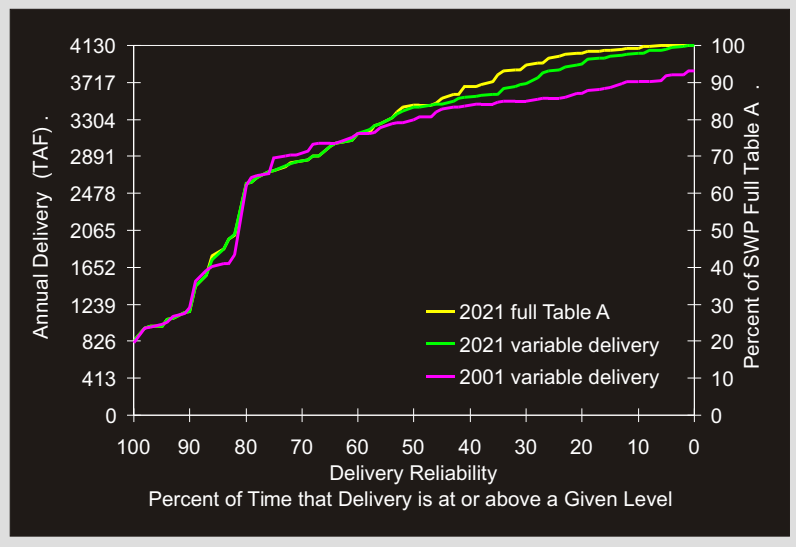
Allocates a limited resource (water) for various competing uses (agricultural, municipal, industrial, environmental, and recreational), given a set of system constraints (physical, legal, and institutional).

Applies specifically to the California water system.

Respects supply priorities between senior water rights holders, settlement of exchange contractors, and SWP and CVP water service contractors.

Intended use of Model

Tool to determine water supply impacts due to changes in system configuration, operations decisions, and/or regulatory requirements.



SWP Delivery Reliability

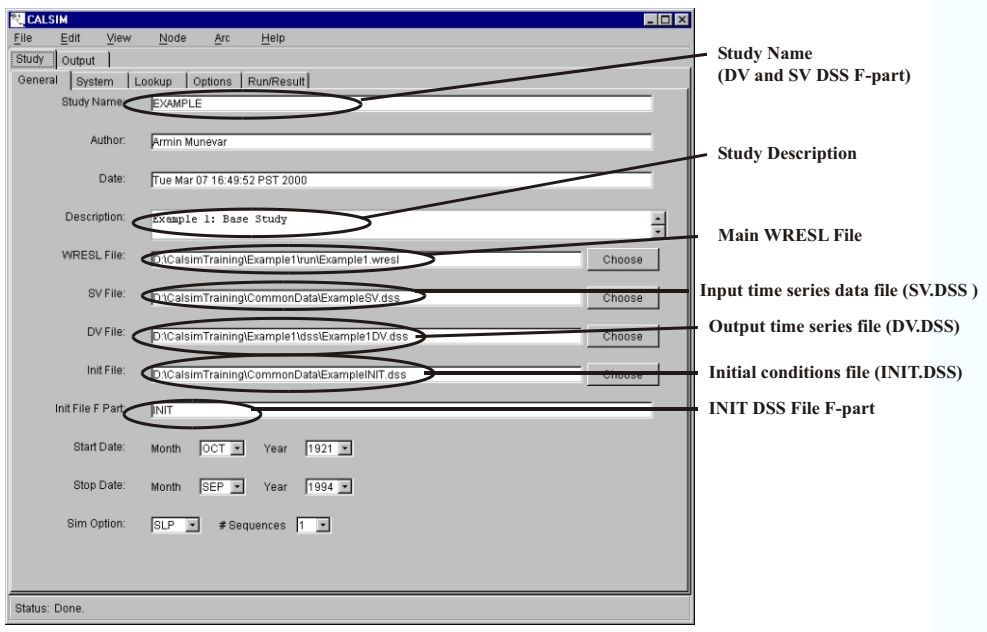
Why use CALSIM II?

Addresses many Oroville obligations throughout the state (local demands, Feather River minimum flows, Delta water quality, exports to SWP contractors, etc.).

Assesses operational objectives over a long-term planning horizon (73 years of simulation).

Evaluates potential water supply impacts throughout the State using a comparative analysis process.

User Interface: Study Control



User interface to setup model runs and view both input and output data.

California's Major Water Projects